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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/577,158	05/24/2000	Tsuyoshi Kowaka	192210US0	4954

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EXAMINER

WILSON, DONALD R

ART UNIT	PAPER NUMBER
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1713

13

DATE MAILED: 06/13/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

MF-13

Office Action Summary

Application No.

09/577,158

Applicant(s)

KOWAKA ET AL.

Examiner

D. R. Wilson

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 02 June 2002.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 29,31-40,43-45,47-50 and 52-54 is/are pending in the application.
- 4a) Of the above claim(s) 33-40,43-45 and 52-54 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 29,31,32 and 47-50 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 4) ☒ Interview Summary (PTO-413) Paper No(s). 11
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

DETAILED ACTION

Response to Restriction Requirement

1. Applicant's election with traverse of the inventions of Group I, now Claims 29, 31-32 and 47-50, and the species of,

- a. a mixture of dimethyl sulfoxide and methanol as the alcohol containing solvent,
- b. sodium methoxide as the saponification catalyst, and
- c. a shell & tube heat exchanging reactor as the type of reactor,

in Paper No. 12 is acknowledged. The traversal is on the ground(s) that *"--- the Examiner has not carried the burden of providing any material reasons and/or examples to support the conclusion that the claims of the restricted groups are patentably distinct"*. This is not found persuasive because applicant acknowledges that the Examiner gave examples of how the product inventions of Group IV could be, (i) made by a materially different process than the processes of Group I and II inventions, and (ii) used in a material different process than the Group III process of making fibers. The Examiner has given appropriate examples to support a conclusion of distinctness, and applicant has failed to prove or provide a convincing argument that the suggested examples are inoperative.

"Examiners must provide reasons and/or examples to support conclusions, but need not cite documents to support the restriction requirement in most cases." See M.P.E.P. § 803.

"The examiner must give an example of an alternative use but need not provide documentation. Applicant then has the burden to prove or provide a convincing argument that the intermediate does not have the suggested use." (M.P.E.P. § 806.04(b), last paragraph).

The statement that because the inventions of Groups I-III *"--- comprise different steps --- is not sufficient basis for demonstrating distinctness"* is interesting but without more is not deemed to be persuasive. If applicant wishes to clearly admit on the record that the different steps are obvious variants the Examiner will consider removing the restriction.

2. Applicant further argues that *"[s]earch and examination of the entire application would not appear to impose a serious burden herein."* This is not deemed to be persuasive because it is a subjective opinion, supported only by the statement that if Claim 29 is patentable, then Claim 52 is necessarily patentable as well. Further, the converse (if Claim 52 is patentable, then Claim 29 is necessarily

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patentable) is not necessarily true. However, if Claim 29 becomes allowable the Examiner will reconsider rejoining Claim 52 with the Group I inventions.

3. Applicant did not present arguments traversing the election of species requirement, and is correct in noting that upon the allowance of a generic claim, applicant will be entitled to consideration of claims to additional species which are written in dependent form or otherwise include all the limitations of an allowed generic claim.

4. The requirement is still deemed proper and is therefore made FINAL. Claims 33-37, 45 and 52-54 remain withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention. Claims 38-40 and 43-44 remain withdrawn from further consideration by the examiner, as being drawn to a non-elected specie of the invention.

5. Claims 29, 31-32 and 47-50 are under consideration.

Response to Amendment

6. Applicant's amendment filed 5/6/02, has been fully considered with the following results.

7. The amendment overcomes the rejection under 35 U.S.C. § 112, second paragraph, which is withdrawn.

8. The amendment overcomes the prior art rejections under 35 U.S.C. 103(a) over:

- a. JP'807 or Sato, each in view of Morrison or Yanai, or
- b. Imai in view of Morrison and Yanai, optionally in view of Examiner's Notice.

However, the amendment is not deemed to be persuasive in overcoming these rejections in further view of Standiford, King or Ishiwa for the reasons discussed below.

Previously Cited Statutes

9. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claim Rejections - 35 USC § 103

10. ***Claims 29, 31-32 and 47-50 are rejected under 35 U.S.C. 103(a) as being unpatentable over:***

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- a. **JP'807 or Sato, each in view of Morrison or Yanai, further in view of Standiford, King or Ishiwa¹, or**
- b. **Imai in view of Morrison and Yanai, optionally in view of Examiner's Notice, further in view of Standiford, King or Ishiwa¹.**

The bases of these rejections were stated in Detailed Action § 8-16 of the previous Office Action.

11. In regards to the new limits of 1.0 to 3.0 for the mole ratio of alcohol with respect to polyvinyl alcohol, it is noted that JP'807 exemplifies a ratio of about 3.5, and that some variation around that exemplified would have been obvious to one of ordinary skill in the art. Also as previously stated, it would have been obvious to one of ordinary skill in the art to minimize the amount of solvent used in order to decrease the costs associated with recovering solvents. It is noted that Sato still exemplifies ratios of alcohol to polyvinyl alcohol within the limits of the instant claims, and that such ratios would thus have been readily envisaged. While Imai has previously been admitted to not teaching the previous mole ratio limits of Claim 51, those limits as well as the new limits would have been considered obvious in view of the teachings of Morrison and Yanai for the previously stated reasons.

12. The argument that none of the individual references disclose the instantly claimed invention is not deemed to be persuasive because the rejection is based upon a combination of references, and the deficiencies of the primary references has been acknowledged.

Applicant cannot show non-obviousness by attacking the reference individually where, as here, the rejection is based on a combination of references. *In re Keller*, 208 USPQ 871 (CCPA 1981).

13. The statement that "[n]one of the above-applied prior art even addresses the above-discussed problem of the prior art degree of obtaining a relatively high degree of saponification of PVA by using a relatively low mole ratio of alcohol with respect to PVA" is also not deemed to be persuasive, because the teachings of both Morrison and Yanai clearly address the problem at least in part. Further, it is to be noted that,

¹ As noted by applicant, see Interview Summary Record of 2/15/02, the previously stated rejection was truncated and didn't include King or Ishiwa. However, this was an obvious error as noted by applicant and is thus not considered to be a new rejection. The inconvenience to applicant by this obvious error is regretted.

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A *prima facie* case of obviousness (for a composition) does not require the solution of the same problem or recognition of the same advantages as the applicants invention. *In re Dillon* 16 USPQ2nd 1897 (CAFC, en banc, 1990), which overrules *In re Dillon* 13 USPQ 2nd 1337 and *In re Wright* 6 USPQ 2nd 1959.

"The fact that appellant has recognized another advantage which would flow naturally from following the suggestion of the prior art cannot be the basis for patentability when the differences would otherwise be obvious." *Ex parte Obiaya*, 227 USPQ 58, 60 (Bd. Pat. App. & Inter. 1985).

14. The argument that "[i]ndeed, Morrison et al and Yanai et al actually teach against the present invention", cannot be sustained. As noted in the previously stated rejection, Morrison specifically teaches a preference for removing one of the products from the reaction mixture, as opposed to using a large excess of the alcohol. Additionally, Yanai teaches that "--- for the purpose of increasing the saponification degree to shift the saponification equilibrium to the formed product side", and that "[f]or this reason it is desired to efficiently distill off the ester used, e.g., methyl acetate" (col. 10, lines 11-32).

15. Applicant further argues that in the teachings of Sato, "--- the concentration is not for PVA but a modified PVA ---". This is not deemed to be persuasive for several reasons. First, it is not seen that the instant claims exclude the copolymers of Sato as they are a polyvinyl alcohol polymer made by the saponification of a polyvinyl ester. Secondly, as has been previously stated, "[a]s the hydrolysis reaction has been equated to the ordinary hydrolysis of PVAc, it would have been obvious to one of ordinary skill in the art that such concentration are known to be used in the hydrolysis reactions disclosed for PVAc."

16. The argument that "--- it has not been shown to use such a shell and tube evaporator in a saponification reaction ---", and without using the present disclosure as a guide, one skilled in the art would not have used a heat-exchanging reactor as recited herein, is also not deemed to be persuasive. Clearly, such reactors are known and are used for removing volatile side products in polymer based reactions as for instance is taught by Standiford, King and Ishiwa, and their use would have been obvious in the processes of JP'807, Sato or Imai for the previously stated reasons.

It must be recognized that any judgment on obviousness is in a sense necessarily a reconstruction based upon hindsight reasoning. But so long as it takes into account only knowledge which was within the level of ordinary skill at the time the claimed invention was made, and does not include knowledge gleaned only from the applicant's disclosure, such a reconstruction is proper. See *In re McLaughlin*, 443 F.2d 1392, 170 USPQ 209 (CCPA 1971).

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It is the Examiner's position that only knowledge within the level of ordinary skill in the art at the time the claimed invention was made has been applied in the stated rejections.

Action Is Final

17. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

18. A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

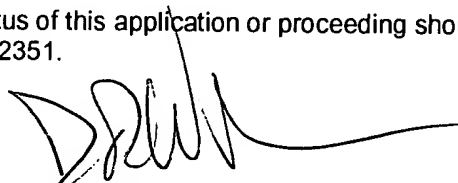
19. This application contains Claims 33-40, 43-45 and 52-54 drawn to an invention nonelected with traverse in Paper No. 12. A complete reply to the final rejection must include cancelation of nonelected claims or other appropriate action (37 CFR 1.144) See MPEP § 821.01.

Future Correspondence

Any inquiry concerning this communication or earlier communications from the examiner should be directed to D. R. Wilson whose telephone number is 703-308-2398.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Wu can be reached on 703-308-2450. The fax phone numbers for the organization where this application or proceeding is assigned are 703-305-5408 for regular communications and 703-305-3599 for After Final communications. The unofficial direct fax phone number to the Examiner's desk is 703-872-9029.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 308-2351.



D. R. Wilson
Primary Examiner
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